



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

**REGION 5**

**77 W. JACKSON BLVD**

**CHICAGO, IL 60604**

**11 MAR 2011**

EPA Region 5 Records Ctr.



**388674**

**MEMORANDUM**

**SUBJECT:** Request for Approval and Funding for a Time-Critical Removal Action at the Markham Dump Site, Markham, Cook County, Illinois (Site ID # B5WK)

**FROM:** Steve Faryan, OSC  
Emergency Response Branch 2, Section 3

**THRU:** Linda Nachowicz, Chief  
Emergency Response Branch 2

**TO:** Douglas E. Ballotti, Acting Director  
Superfund Division

**I. PURPOSE**

The purpose of this Action Memorandum is to request and document your approval to expend up to \$396,000 to conduct a time-critical removal action at the Markham Dump Site (Site) located in Markham, Cook County, Illinois. The proposed time-critical removal action herein will mitigate the threats from lead contaminated soils and solid waste and hazardous waste in 55- gallon drums, compressed gas cylinders, plastic totes, and large sacks by properly identifying, consolidating, packaging, treatment and removal for off-site disposal.

The Action Memorandum would serve as approval for expenditures by U.S. EPA, as the lead technical agency, to take actions described herein to abate the imminent and substantial endangerment posed by hazardous substances at the Site. The proposed removal of hazardous substances would be taken pursuant to Section 104(a)(1) of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), 42 USC 9604(a)(1), and Section 300.415 of the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), 40 CFR 300.415.

## **II. SITE CONDITIONS AND BACKGROUND**

CERCLIS ID: ~~ILSFN0507829~~ ILN000510534

Category: Time-Critical Removal Action

The Markham Dump Site is an uncontrolled and easily assessable open dump that has been the site of illegal dumping of solid and hazardous materials for as long as 30 years. A tire fire erupted in the spring of 2010 and brought attention to the open dump. The local fire and police responded to the fire. The Illinois Environmental Protection Agency (IEPA) was alerted by the City of Markham in April of 2010, of the fire and illegal dump site located within the City of Markham in Cook County, Illinois.

IEPA responded to the Site and observed tens of thousands of tires, abandoned boats, solid waste and hazardous waste and chemicals in 55- gallon drums, compressed gas cylinders, plastic totes and large sacks of chemicals which were all abandoned on site. IEPA requested the assistance of the Illinois Attorney General's office to enter into an agreement with the City of Markham to set up concrete barriers, police surveillance, and security cameras to prevent additional dumping.

### **A. Site Description**

#### **1. Removal site evaluation**

On April 7, 2010, IEPA responded to a tire fire at an open dump on the south side of Markham, Illinois. During the week of April 19, 2010, the IEPA conducted private well location surveys; sampled a few private wells in the area; conducted XRF screening of on-site soils; collected miscellaneous grab samples; and collected a sample from one of the on-site totes. The private well samples were analyzed for volatile organic compounds (VOC), semivolatile organic compounds (SVOC), metals, and cyanide. The results for the private well samples indicated no detections of VOCs, SVOCs, cyanide or metal results above the removal action levels for drinking water.

On April 28<sup>th</sup>, U.S. EPA conducted a site walk through with representatives from the Illinois Attorney General Office and IEPA.

On May 10, 2010, U.S. EPA personnel and Superfund Technical Assistance and Response Team (START) contractor personnel conducted a removal site assessment. Four samples were collected from totes and drums and super sacks found on site, four soil samples were collected from the burned tire area, and 2 bulk samples were collected for asbestos analytical. The following potentially hazardous materials and containers were observed at the Markham Dump:

- White solid material lying on the ground and in 55-gallon poly drums suspected of containing pool chemicals (analytical results indicated a pH of 9.4 SUs and 4.5 percent chlorine for a sample from one of these drums);
- 2000-pound super sacks labeled "Sodium Tripoly Phosphate;"

- 300-gallon totes partially filled with a combustible liquid;
- Several 50-pound bags labeled "Ammonium Sulfate;"
- One partially (one-quarter) full drum of "Pyrazol Yellow BG Powder" (analytical results revealed that a sample from this drum had a pH of 12 SUs);
- Several gas cylinders (suspected to be empty), thousands of empty containers including poly, steel, and fiberboard 55-gallon drums; 5-gallon buckets; and
- Broken battery casings were observed in several areas and XRF and analytical samples confirmed highly elevated lead levels in the surface soils.

The northeast portion of the Site contains white solid chunks of chemicals lying on the ground which have been released from bags and super sacks. Field testing using pH paper of a rain puddle near these chemicals indicated a pH of 11 standard units (SUs), which indicates that the chemicals are leaching to soil. In addition, numerous other chemicals were observed in 55-gallon poly drums open to the atmosphere. Bags labeled "Ammonium Sulfate" also were present on site, and a sample collected from one of the bags contained 2,800 mg/kg of ammonia (as nitrogen).

IEPA reported that battery casings and lead contaminated soil were observed in an area of the Site near Oakley Street. U.S. EPA conducted an additional assessment of the area on October 26, 2010, and conducted a survey using an XRF unit and GPS unit. Six soil samples were collected for total metals and TCLP metals analysis. The results of the survey and sampling indicated there are two areas just off the former Oakley Street that contain elevated lead levels as high as 10,000 mg/kg and leachable lead concentrations which are considered to be RCRA characteristic hazardous waste.

## **2. Physical location**

The Markham Dump Site occupies approximately 12 acres on the south side of Markham, Illinois. Site coordinates are Latitude 41°35'48.59" North and Longitude - 87°40'22.16" West. The Site is bordered by 159<sup>th</sup> Street to the north, Dixie Highway to the east, the Calumet-Union Drainage Canal to the south, and Western Avenue to the west. The Site is located in a mixed commercial, industrial, and residential area. A church and at least two residences (abandoned) were identified within the boundaries of the Site. Homeless people live on the property. The potential exists for nearby human populations and animals to come in contact with these chemicals.

The Site contains a burn area where the tire fire occurred and former streets which allow easy access to the area for dumping. Along Leavitt Street, the following containers were observed: super sacks, totes, drums, miscellaneous small containers, and gas cylinders. The Calumet Union Ditch is located on the south side of the Site and it flows east to the Little Calumet River. Residences are located just west of the Site.

The area surrounding the Markham Dump Site was screened for Environmental Justice (EJ) concerns using Region 5's EJ Assist Tool (which applies the interim version of the national EJ Strategic Enforcement Assessment Tool (EJSEAT)). Census tracts with a score of 1, 2, or 3 are considered to be high-priority potential EJ areas of concern according to U.S. EPA Region 5.

The Markham Dump Site is in a census tract with a score of 2. Therefore, Region 5 considers this site to be a high-priority potential EJ area of concern. Five other census tracts within a one mile radius also have EJSEAT scores of 1, 2, or 3. Analysis of this area using the EJ Geographic Analysis Tool shows that the population is 98.9% minority, predominantly African-American, and greater than 11.9% of the population is living below the poverty level. Please refer to the attached analysis for additional information (Attachment D).

### **3. Site characteristics**

The Markham Dump Site is an uncontrolled and easily assessable open dump that has been the site of illegal dumping of solid and hazardous materials for as long as 30 years. The property is part owned by the City of Markham through a Public Sale of Real Estate for the non-payment of taxes. A tire fire erupted in the spring of 2010 and brought attention to the open dump.

### **4. Release or Threatened Release into the environment of a hazardous substance, or pollutant or contaminant**

The release and threatened release into the environment has been documented by the site assessment and sampling activities. Hazardous substances, or pollutants or contaminants have been observed leaking from their containers and have been documented by sampling events to be migrating via storm water to the adjacent canal.

### **5. NPL status**

The Site is not on the National Priorities List.

## **B. Other Actions to Date**

### **1. Previous actions**

The IEPA conducted a removal of the tires and solid waste during the summer of 2010. The IEPA removed 56,000 tires at an estimated cost of \$200,000. In addition, 689 truckloads of solid waste totaling 10,409 tons of material were removed and disposed of for a cost of \$813,000. Both the tire removal and solid waste removal came to a total cost of \$1,013,000. These funds were utilized by IEPA from tipping fees charged at landfills, and from the abandoned tire fund.

### **2. Current actions**

Currently the Site is secured with concrete barriers at each entrance except at the entrance to the church which has a chain with a lock to allow access to the church. The City of Markham is providing police surveillance and camera surveillance to prevent any additional dumping on the site.

### **C. State and Local Authorities' Roles**

#### **1. State and local actions to date**

On June 17, 2010, IEPA requested U.S. EPA's assistance in mitigating the potential threats at the Site.

#### **2. Potential for continued State/local response**

The City of Markham has entered into an agreement with IEPA and Illinois Attorney General to continue securing the property.

### **III. THREATS TO PUBLIC HEALTH OR THE ENVIRONMENT, AND STATUTORY AND REGULATORY AUTHORITIES**

The conditions remaining at the Markham Dump Site present a substantial threat to the public health or welfare, and the environment, and meet the criteria for a time-critical removal action as provided for in the NCP, 40 CFR 300.415(b)(2). These criteria include, but are not limited to, the following:

#### **Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances or pollutants or contaminants.**

High levels of lead were found at the surface from battery breaking and burning operations. Total lead levels range from 2,800 mg/kg to as high as 10,000 mg/kg. TCLP concentrations of lead were found to be 8.6 mg/l which is above the 5 mg/l RCRA standard making the contaminated soil a RCRA characteristic hazardous waste.

The northeast portion of the Site contains white solid chunks of material believed to be pool and industrial chemicals. Field testing using pH paper of the storm water near these chemicals indicated a pH of 11 SUs, which indicates that the pool chemicals are leaching to soil. In addition, numerous other suspected pool chemicals were observed in 55-gallon poly drums open to the atmosphere. Bags labeled "Ammonium Sulfate" also were present on site, and a sample collected from one of the bags contained 2,800 mg/kg of ammonia (as nitrogen). Ammonium sulfate has a median lethal dose (LD<sub>50</sub>) of 2,840 mg/kg for rats. In addition, if the ammonium sulfate were to reach the Calumet Union Ditch, it could be potentially fatal to aquatic life. If the sodium tri poly phosphate were to reach the Calumet Union Ditch, this could result in excessive nutrient (phosphate) loading which would be harmful to aquatic life. The Calumet Union Ditch runs on the south perimeter of the Site and receives the surface and storm water flow from the Site.

The Site is located in a mixed commercial, industrial, and residential area. A church is located on site, and dogs live on the property. The public continues to access the Site to use the church and the Site is not fenced. The potential exists for nearby human populations and animals to come in contact with these chemicals through direct contact or contact with the storm water.

**Hazardous substances or pollutants or contaminants in drums, barrels, tanks, or other bulk storage containers, that may pose a threat of release.**

The Site contains poly drums full of suspected pool and industrial chemicals. The chemicals are found in drums and bags labeled "Ammonium Sulfate," totes containing oil, and numerous other small containers. Sample MD-C04-051010 from one of the drums had a pH of 12 SUs which is just under the RCRA corrosivity characteristic limit of 12.5 SUs. Sample MD-C01-051010 from the suspected pool chemicals contained 4.5 percent chlorine and had a pH of 9.4 SUs. Also, the northeast portion of the Site contains un-containerized white solid chunks lying on the ground. Field testing using pH paper and analysis of a sample from the storm water runoff near the chemicals indicate that the chemicals are leaching to soil and to the environment. In addition, some drums were open to the atmosphere or tipped over. The contents of the drums are spilling to the ground and releasing their contents to the soil and to the storm water and storm water runoff. The storm water drains to the Calumet Union Ditch which borders the south perimeter of the Site and leads to the Little Calumet River which ultimately drains to Lake Michigan.

**High levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface that may migrate.**

Elevated lead levels were detected during the initial site assessment and samples collected and verified during a supplemental assessment with samples and analytical results showing levels of lead ranging from 2,800 mg/kg to 10,000 mg/kg. TCLP levels for lead were documented at 8.6 mg/l which is above the standard of 5 mg/l making the waste a characteristic hazardous waste according to RCRA. The lead contamination has been documented at or near the surface and can migrate through dust dispersion and through storm water runoff into the adjacent Calumet Union Ditch which leads to the Little Calumet River which drains to Lake Michigan.

**Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released.**

High lead levels documented in surface soils were found to be RCRA characteristic hazardous waste according to TCLP testing and can migrate via wind and dust dispersion and through storm water runoff.

The drums, totes and super sacks that are found along Leavitt Street are open to the elements. Samples and analytical results have shown high pH levels, high ammonia levels and chlorine levels in samples collected of the wastes. The drainage of the Site leads to the Calumet Union Ditch which leads to the Little Calumet River.

**Threat of fire or explosion**

Garbage fires and tire fires have historically been set at the Site. The totes, drums, cylinders and bags and super sacks of chemicals have been highly impacted from

the previous fires causing a greater potential to release their contents. The liquids in the totes are combustible liquids which compounds the threat of fire.

**The availability of other appropriate federal or state response mechanisms to respond to the release.**

As indicated in their June 17, 2010 referral letter, IEPA has been working to remove the non-hazardous items from the dump. However, due to funding and statutory limitations, IEPA has requested U.S. EPA assistance for the disposal of the hazardous substances that may be present at the Site.

#### **IV. ENDANGERMENT DETERMINATION**

Given the Site conditions, the nature of known and suspected hazardous substances on Site, and the potential exposure pathways described in Section II and III above, actual or threatened releases of hazardous substances from this Site, if not addressed by implementing the response actions selected in this Memorandum, may present an imminent and substantial endangerment to public health, or welfare, or the environment.

#### **V. PROPOSED ACTIONS AND ESTIMATED COSTS**

##### **A. Proposed Actions**

##### **1. Proposed action description**

The response actions described in this memorandum directly address actual or potential releases of hazardous substances on Site, which may pose an imminent and substantial endangerment to public health, or welfare, or the environment. Removal activities on Site will include:

1. Develop and implement a Site Health and Safety Plan and Site Security Plan;
2. Stage drums, totes, small containers, cylinders, and super sacks. Sample and analyze all contents of the containers and set up appropriate disposal.
3. Further delineate the extent of the lead contaminated surface soil and battery casings.
4. Excavate the lead contaminated soil and battery casings and treat the material with a fixation agent prior to disposal. The Site will have a clean-up level of 800 mg/kg for total lead<sup>1</sup>, which is the recommended lead screening level for a commercial/industrial exposure scenario by the U.S. EPA's Technical Review Workgroup for Lead. Soils with lead above the cleanup levels will be removed down

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<sup>1</sup> U.S. EPA. Adult Lead Methodology Frequently Asked Questions. Washington, DC, U.S. EPA Technical Review Workgroup for Lead (TRW).  
<http://www.epa.gov/superfund/health/contaminants/lead/almfaq.htm>.

to a depth of approximately 30 inches, which is the maximum frost depth for the area<sup>2</sup>. Excavation to this depth is necessary due to the presence of crushed battery casings in the subsurface which have a propensity to migrate to the surface from frost heaving.

5. Bulk all liquids and stabilize the solid materials, soil and empty containers into compatible waste streams.
6. Transport and dispose of all waste streams off site at a permitted facility that is in compliance with the U.S. EPA Off-Site Rule.
7. Off hours security will be provided during the removal action.

The removal action will be conducted in a manner not inconsistent with the NCP. The OSC has initiated planning for provision of post-removal Site control consistent with the provisions of Section 300.415(l) of the NCP. Elimination of all threats presented by hazardous substances in the buildings is, however, expected to minimize the need for post-removal Site control.

#### Off-Site Rule

All hazardous substances, pollutants, or contaminants removed off-site pursuant to this removal action for treatment, storage, and disposal shall be treated, stored, or disposed of at a facility in compliance, as determined by U.S. EPA, with the U.S. EPA Off-Site Rule, 40 C.F.R. § 300.440.

#### **2. Contribution to remedial performance:**

No Post Removal Site Control will be required when this removal action is completed. The IEPA and Illinois Attorney General's Office have entered into an order with the City of Markham to secure the property with surveillance cameras and prevent unauthorized access by blocking the roadways.

#### **3. Engineering Evaluation/Cost Analysis (EE/CA)**

Not Applicable

#### **4. Applicable or relevant and appropriate requirements (ARARs)**

All applicable, relevant, and appropriate requirements (ARARs) of Federal and State law will be complied with to the extent practicable considering the exigencies of the circumstances.

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<sup>2</sup> Wendland, W. M. (1998). "A Ground Frost Climatology for Illinois." Trans., Illinois State Acad. Sci., Springfield, Ill. 91(1), 57-67.



## Federal

RCRA Subtitle C regulations involving the treatment and disposal of the hazardous waste found on site.

## State

A letter was sent to the IEPA, Bruce Everetts on January 19, 2011, to identify ARARs in a timely manner. IEPA provided a response on January 26, 2011, identifying the State ARAR's.

### **5. Project Schedule**

The proposed removal action will take approximately six weeks to complete.

### **B. Estimated Costs**

The detailed cleanup contractor cost is presented in Attachment B and the Independent Government Cost Estimate is presented in Attachment C. Estimated costs are summarized below:

REMOVAL ACTION PROJECT CEILING ESTIMATE	
<b><u>Extramural Costs:</u></b>	
<b><u>Regional Removal Allowance Costs:</u></b>	
Total Cleanup Contractor Costs	\$300,000
(This cost category includes estimates for ERRS, and includes a 20% contingency)	
<b><u>Other Extramural Costs Not Funded from the Regional Allowance:</u></b>	
Total START, including multiplier costs	\$ 30,000
Subtotal	<u>\$ 30,000</u>
Subtotal Extramural Costs	\$330,000
Extramural Costs Contingency (20% of Subtotal, Extramural Costs rounded to nearest thousand)	\$ 66,000
<b>TOTAL REMOVAL ACTION PROJECT CEILING</b>	<b>\$396,000</b>

## **VI. EXPECTED CHANGE IN THE SITUATION SHOULD ACTION BE DELAYED OR NOT TAKEN**

Given the Site conditions, the nature of the hazardous substances and pollutants or contaminants documented on Site, and the potential exposure pathways to nearby populations described in Sections II, III and IV above, actual or threatened release of hazardous substances and pollutants or contaminants from the Site, failing to take or delaying action may present an imminent and substantial endangerment to public health, welfare or the environment, increasing the potential that hazardous substances will be released, thereby threatening the adjacent population and the environment.

## **VII. OUTSTANDING POLICY ISSUES**

None

## **VIII. ENFORCEMENT**

For administrative purposes, information concerning the enforcement strategy for this Site is contained in the attached Enforcement Confidential Addendum.

The total U.S. EPA costs for this removal action based on full-cost accounting practices that will be eligible for cost recovery are estimated to be \$660,806.<sup>3</sup>

$$(\$396,000 + \$10,000) + (62.76\% \times \$406,000) = \$660,806$$

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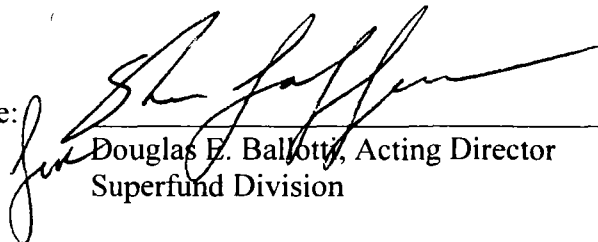
<sup>3</sup> Direct Costs include direct extramural costs and direct intramural costs. Indirect costs are calculated based on an estimated indirect cost rate expressed as a percentage of site-specific direct costs, consistent with the full cost accounting methodology effective October 2, 2000. These estimates do not include pre-judgment interest, do not take into account other enforcement costs, including Department of Justice costs, and may be adjusted during the course of a removal action. The estimates are for illustrative purposes only and their use is not intended to create any rights for responsible parties. Neither the lack of a total cost estimate nor deviation of actual total costs from this estimate will affect the United States' right to cost recovery.

## IX. RECOMMENDATION

This decision document represents the selected removal action for the Markham Dump Site, Markham, Cook County, Illinois, developed in accordance with CERCLA as amended, and is not inconsistent with the NCP. This decision is based on the administrative record for the Site (Attachment A). Conditions at the Site meet the NCP Section 300.415(b)(2) criteria for a removal and I recommend your approval of the proposed removal action.

The total project ceiling if approved will be \$396,000, of which an estimated \$366,000 may be used for cleanup contractor costs. You may indicate your approval by signing below.

Approve: \_\_\_\_\_

  
Douglas E. Ballotti, Acting Director  
Superfund Division

3/11/11  
Date

Disapprove: \_\_\_\_\_

\_\_\_\_\_  
Douglas E. Ballotti, Acting Director  
Superfund Division

\_\_\_\_\_  
Date

### Enforcement Addendum

#### Attachments:

- A) Administrative Record
- B) Detailed Contractor and START Cost Estimate
- C) Independent Government Cost Estimate
- D) EJ Analysis

Cc: David Chung, U.S. EPA HQ 5202G  
M. Chezik, U.S. Department of Interior, w/o Enf. Addendum  
Charlene Thigpen, IEPA w/o Enforcement Addendum  
Bruce Everetts, IEPA w/o Enforcement Addendum

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**(REDACTED 1 PAGE)**

**ENFORCEMENT CONFIDENTIAL ADDENDUM**

**MARKHAM DUMP SITE  
MARKHAM, COOK COUNTY, ILLINOIS**

**(REDACTED 1 PAGE)**

**ENFORCEMENT CONFIDENTIAL  
NOT SUBJECT TO DISCOVERY**

**ATTACHMENT A**  
**U.S. ENVIRONMENTAL PROTECTION AGENCY**  
**REMOVAL ACTION**

**ADMINISTRATIVE RECORD**  
**FOR**  
**MARKHAM DUMP SITE**  
**MARKHAM, COOK COUNTY, ILLINOIS**

**ORIGINAL**  
**JANUARY 27, 2011**

<u>NO.</u>	<u>DATE</u>	<u>AUTHOR</u>	<u>RECIPIENT</u>	<u>TITLE/DESCRIPTION</u>	<u>PAGES</u>
1	00/00/00	Bing Maps Aerial Imagery	File	Map: Markham Dumping Site from Western Avenue to the Dixie Highway and 10 <sup>th</sup> to 161 <sup>st</sup> Place (Calumet Union Drainage Canal)	1
2	05/00/10	Illinois EPA	File	Fact Sheet #1: Investiga- tion at Markham Illegal Dumping Site	4
3	06/17/10	Illinois EPA	Crosetto, T., U.S. EPA	Letter re: Request for Assignment of an On-Scene- Coordinator and Assistance at the Markham Illegal Dump Site	1
4	07/00/10	Illinois EPA	File	Fact Sheet #2: Investiga- tion at Markham Illegal Dumping Site	4
5	07/19/10	Weston Solutions, Inc.	U.S. EPA	Site Assessment Report for the Markham Dump	19
6	10/25/10	FIELDS	File	Map: Markham Landfill Arsenic Concentrations	1
7	10/25/10	FIELDS	File	Map: Markham Landfill Lead Concentrations	1
8	11/04/10	Gianini, C STAT Analysis Corp.	Graczyk, L., Weston Solutions, Inc.	Letter re: Analytical Results for 6 Samples Collected on 10/25/10 at the Markham Dump Site	37
9	01/19/11	Faryan, S., U.S. EPA	Everetts, B., Illinois EPA	Letter re: Request for Illinois EPA to Identify any/all State ARARs for the Markham Dump Site	1
10	01/19/11	Everetts, B., Illinois EPA	Farayan, S., U.S. EPA	Letter re: Response to U.S. EPA ARARs Request Letter Dated 1/19/11	1
11	00/00/00			Action Memorandum: Markham Dump Site (PENDING)	

**ATTACHMENT B**

**DETAILED CLEANUP CONTRACTOR AND START ESTIMATE**

**MARKHAM DUMP SITE  
MARKHAM, COOK COUNTY, ILLINOIS**

**NOT RELEVANT TO THE SELECTION OF THE REMOVAL ACTION**

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**Attachment B**  
**Detailed Contractor and START Cost Estimate**

**DETAILED CLEANUP CONTRACTOR AND START ESTIMATE**

The estimated cleanup contractor costs necessary to complete the removal action at the  
DETAILED CLEANUP CONTRACTOR AND START ESTIMATE

The estimated cleanup contractor costs necessary to complete the removal action at the  
is as follows:

**CONTRACTOR ESTIMATE**

Personnel	\$ 103,605
Equipment	\$ 30,600
Sub-Contracts T&D	\$140,795
Security:	\$ 25,000
Sub-Total	\$300,000
20% Contingency	\$ 60,000

Total      \$ 360,000

**START ESTIMATE**

20 work days	
(200 hrs@ \$ 110/hr.)	\$ 22,000
Report writing	\$ 6,000
Equipment	\$ 1,000
Subcontracts	\$ 1,000
Total	\$ 30,000

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**ATTACHMENT C**

**INDEPENDENT GOVERNMENT COST ESTIMATE**

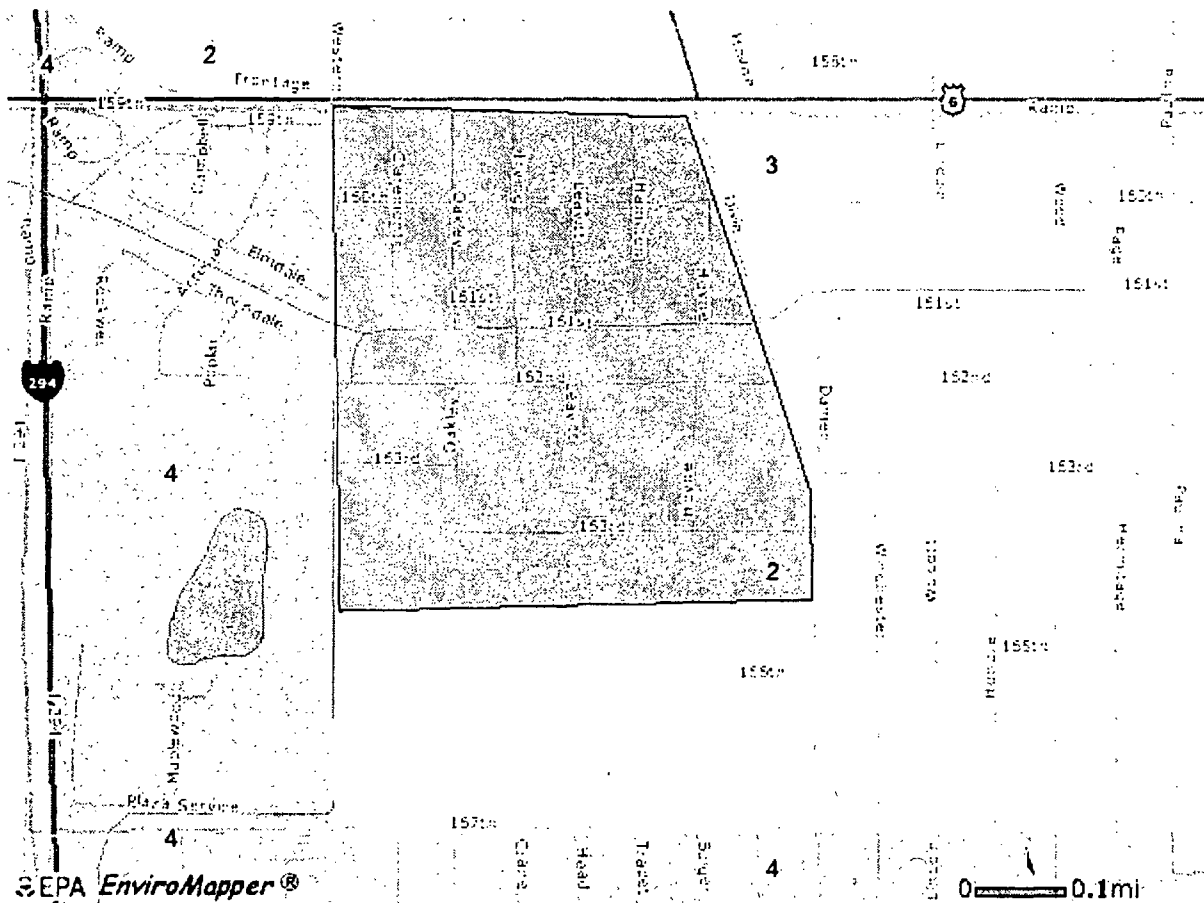
**MARKHAM DUMP SITE  
MARKHAM, COOK COUNTY, ILLINOIS**

**NOT RELEVANT TO THE SELECTION OF THE REMOVAL ACTION**

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Attachment D  
Environmental Justice Analysis

Region 5 Interim EJ Screening Tool **U.S. Environmental Protection Agency**



Markham Dump Site

## EJ track scores within 1 mile of Markham Dump Site.

Display all the EJ Scores within 1609 meters or one mile?

Rank	State	Address	Rank	Score	EJ Score
1	IL	17031827500	1	5685	70.1
2	IL	17031825600	4	5768	45.4
3	IL	17031827600	2	3830	57.5
4	IL	17031827400	3	5088	54.7
5	IL	17031824900	4	2805	49.9
6	IL	17031824800	2	6518	60.4
7	IL	17031827300	2	3948	60.1
8	IL	17031826902	3	2139	53.1
9	IL	17031825503	4	6875	46.7
10	IL	17031828401	5	3713	39.2
11	IL	17031827700	4	3174	46.3

# EJ Geographic Analysis Tool for Markham Dump Site

## County and State Comparison

### Overview

<u>Total Persons:</u>	752	<u>Land Area:</u>	100%	<u>Households in Area:</u>	221
<u>Population Density:</u>	2464 /sq mi	<u>Water Area:</u>	0%	<u>Housing Units in Area:</u>	227
<u>Percent Minority:</u>	98.9%	<u>Persons Below Poverty Level:</u>	86 (11.9%)	<u>Households on Public Assistance:</u>	12
<u>Percent Urban:</u>	100%	<u>Housing Units Built &lt;1970:</u>	93%	<u>Housing Units Built &lt;1950:</u>	23%

### Race and Age\*

(\* Columns that add up to 100% are highlighted)

<u>Persons (%)</u>	<u>Age Breakdown</u>	<u>Persons(%)</u>
<u>White:</u>	8 (1.1%)	<u>Child 5 years or less:</u> 81 (10.8%)
<u>African-American:</u>	729 (96.9%)	<u>Minors 17 years and younger:</u> 215 (28.6%)
<u>Hispanic-Origin:</u>	9 (1.2%)	<u>Adults 18 years and older:</u> 537 (71.4%)
<u>Asian/Pacific Islander:</u>	0 (0.0%)	<u>Seniors 65 years and older:</u> 135 (17.9%)
<u>American Indian:</u>	0 (0.0%)	
<u>Other Race:</u>	7 (1.0%)	<i>This space intentionally left blank</i>
<u>Multiracial:</u>	8 (1.0%)	